

A1
side cryptographic function (128) with the dial-up user's private key never being transferred off the security device. An example of the signed response string is described in detail below.

IN THE DRAWING:

Please amend the figure as shown in the marked-up version of the drawing enclosed herein, with changes shown in red. Figure 9 has been amended to correct text within a box of the flowchart.

IN THE CLAIMS:

Please amend the claims as follows.

A2
[c2] (Amended) The network system of claim 1, further comprising:
a security device holding authentication information; and
a security device reader attached to the client computer for reading the security device.

A3
[c14] (Amended) A network system providing integration, comprising:
a client computer;
a server;
a server-side cryptographic function providing cryptographic services located on the server;
a PKI-Bridge providing an interface between the server and the server-side cryptographic function;
a remote access switch providing an interface between the client computer and the server;
a client-side cryptographic function providing cryptographic services located on the client computer;